Listing of Claims

1-20. (Canceled)

21. (Currently Amended) A method of controlling the placement of at least one of a plurality of product from a first transporter moving at a transport speed and having an output region to a second transporter moving at a baseline speed and having an input region and an output region, the method comprising the steps of:

setting the transport speed generally equal to the baseline speed in the absence of an event;

monitoring at least one of the output region of the first transporter and the input region of the second transporter for the occurrence of an event, wherein an event corresponds to one of the detection of the presence of or absence of a first one of the product in one of the output region of the first transporter and the input region of the second transporter; and

controlling ~~deviating~~ the transport speed ~~from~~ according to the baseline speed upon a detection of an event, wherein the transport speed is determined to be one of a speed greater than, less than, or equal to the baseline speed upon the detection of the event.

22. (Original) The method of claim 21, wherein a first event corresponds to the detection of the absence of the first one of the product from the output region of the first transporter.

23. (Original) The method of claim 22, wherein the transport speed is increased from the baseline speed in response to the detection of the first event.

24. (Original) The method of claim 21, wherein a second event corresponds to the detection of the presence of the first one of the product in the output region of the first transporter and the detection of a second one of the product in the input region of the second transporter.

25. (Original) The method of claim 24, wherein the transport speed is decreased from the baseline speed in response to the detection of the second event.

26. (Currently Amended) A transport control system for controlling the placement of at least one of a plurality of product from a first transporter to a second

transporter, the first transporter having an output region and a first drive system to drive the first transporter at a transport speed and the second transporter having an input region, an output region, and a second drive system to drive the second transporter at a baseline speed, the transport control system comprising:

a first sensor configured to detect the presence or absence of the product and positioned to detect the presence or absence of the product within the output region of the first transporter;

a second sensor configured to detect the presence or absence of the product and positioned to detect the presence or absence of the product within the input region of the second transporter; and

a controller connected to the first sensor and the second sensor, the controller configured to control the transport speed of the first transporter based at least on one of a first input signal from the first sensor and a second input signal from the second sensor, wherein the controller increases the transport speed above the baseline speed of the second transporter when the first input signal indicates that a first one of the product is not present in the output region of the first transporter.

27. (Original) The transport control system of claim 26, wherein the controller decreases the transport speed below the baseline speed of the second transporter when the first input signal indicates that the first one of the product is present in the output region of the first transporter and the second input signal indicates that a second one of the product is present in the input region of the second transporter.

28. (Original) The transport control system of claim 26, wherein the first sensor includes an emitter and a detector configured to detect a signal emitted by the emitter.

29. (Original) The transport control system of claim 28, wherein when the first one of the product is within the output region of the first transporter, the signal emitted from the emitter is blocked by the first one of the product from reaching the detector.

30-35. (Canceled)

36. (New) The method of claim 21, further comprising the step of controlling the baseline speed in response to the detection of the event in the output region of the second transporter.

37. (New) The method of claim 36, wherein the controlling step further comprises deviating the transport speed from the baseline speed upon the detection of the event when the baseline speed remains the same.

38. (New) The method of claim 37, wherein the controlling step further comprises maintaining the transport speed at the same speed upon the detection of the event and upon a change to the baseline speed.

39. (New) The transport control system of claim 27, wherein the controller maintains the transport speed at the same speed upon the detection of the event and upon a change to the baseline speed.

40. (New) The transport control system of claim 39, further comprising a third sensor configured to detect the presence or absence of the product and positioned to detect the presence or absence of the product within the output region of the second transporter.

41. (New) The transport control system of claim 40, wherein the controller maintains the transport speed at the sem speed upon the detection of the event and upon a change to the baseline speed.

42. (New) The transport control system of claim 41, wherein the controller controls the baseline speed upon the detection of the event in the output region of the second transporter.